

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	
)	
General Communications, Inc. Request)	WT Docket No. 16-209
for Waiver of Certain Requirements in)	
the upper 6 GHz Bands)	
)	
)	

To: The Commission

***Ex Parte* Comments of EIBASS**

Engineers for the Integrity of Broadcast Auxiliary Services Spectrum (EIBASS) hereby respectfully submits its *ex parte* comments in the above-captioned public notice relating to a waiver request by General Communications, Inc. (GCI) for point-to-point microwave stations in the "upper 6 GHz bands" in Alaska.

I. GCI Is Mistaken in Its Claim That Alaska Has No 7 GHz TV Pickup Stations

1. In its reply comments GCI makes the incorrect claim that Alaska has no 7 GHz TV Pickup stations; as was documented in the EIBASS reply comments, TV Pickup Station WQRU451 is authorized for the 6,875–7,125 MHz TV BAS band, with a continental United States operational area. This includes of all portions of Alaska more than 35 miles from the Canadian border. A copy of the WQRU451 license is attached, as Figure 1. Had GCI made a thorough search of the Commission's Universal Licensing System (ULS), it would have found this license, just as EIBASS did. Given GCI's own admission that it did not request waiver of Section 101.147(a), note 34, this is a fatal defect to their waiver request.

II. Reservation of Two of the Ten 7 GHz TV BAS Band Channels Nation-wide Was Fundamental to Broadcasters Agreeing to Shared Use of That Band

2. At page 4 of its reply comments, GCI states "EIBASS contends that the FCC *should*¹ permanently set aside these channels² for exclusive BAS use, even if no licensee ever actually uses the channels and they lay fallow indefinitely." GCI seems not to understand that is exactly what the Commission did, in the WT Docket 10-153 rulemaking; that is, this is not a mere

¹ Italicization added.

² TV BAS Channels B5 (6,975–7,000 MHz) and B6 (7,000–7,025 MHz).

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EIBASS suggestion, but rather a spectrum sharing decision (restriction) made by the Commission. The initial EIBASS comments even pointed out the pertinent paragraphs from the 2011 WT Docket 10-153 R&O/FNPRM/MO&O. Indeed, EIBASS' prudence in doing so is borne out by GCI's statement at page 7 of its reply comments that it would be an "extreme and novel burden" to require a party seeking a rule waiver or waivers to have to "familiarize themselves with not only the Commission's rules but also every FCC order that might have contained language relating to those rules." EIBASS submits that is exactly what a party seeking to overcome the high burden of a rule waiver had better do if it expects success based on answering opposition objections with sound arguments.

3. GCI further seems not to understand that these two 7 GHz TV BAS band channels (B5 and B6) are also available to fixed-link TV BAS stations (studio-to-transmitter link (STL) and Inter City Relay (ICR) stations), and thus its "lay fallow indefinitely" claim³ is also incorrect.

III. Likelihood of Major News Event in Alaska

4. GCI arrogantly claims that there is little likelihood of a major news event in Alaska; the possibility of a major news event in what is normally a category III or IV electronic news gathering (ENG) market⁴ is exactly why the Commission in its wisdom excluded TV BAS Channels B5 and B6 from sharing with Part 101 Fixed Service (FS) stations nation-wide. Major Alaska news events such as the 1964 Good Friday earthquake, the 1967 Fairbanks floods, the 2004 Alaska wildfires consuming 6.7 million acres, and the 1989 Exxon Valdez oil spill are all examples of a major news event that could instantly transform even a remote area of Alaska from ENG category IV to ENG category I. This is why parking is not allowed in front of fire hydrants, even though most of the time there is no fire and the parking spot must "lay fallow

³ GCI reply comments, at page 4.

⁴ As categorized by SBE, and as adopted in the July 3, 2002, ET Docket 95-18 Second R&O, the four categories of TV electronic news gathering (ENG) use are:

Category I: "Los Angeles" or "LA." Extremely heavy use, mostly split channel. There is lots of itinerant use and channel borrowing and sharing; even so, seven channels aren't enough.

Category II: "Metro." Spectrum is heavily used, especially during the news hours. There is some split channel use, not a lot, and some itinerant use. There is regular channel borrowing and sharing.

Category III: "Light." There is some electronic news gathering (ENG), some fixed link, maybe even some channels mostly vacant most of the time. Typically, a small-market, low-competition situation.

Category IV: "Rural." ENG is unheard of, the use is for fixed, long-haul relays to small-market TV stations, to TV translator stations, and to cable television headends. In some areas not all channels are even used.

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indefinitely." It also explains why most people do not rely on fortune tellers for emergency planning. See the attached Figure 2.

5. While GCI notes that broadcasters have other frequency bands for ENG use such as 2 GHz and 13 GHz, EIBASS notes that all but two channels of the 13 GHz TV BAS band are now shared with Part 101 FS stations, that the GCI waiver, if granted, would also preclude the 6.5 GHz TV Broadcast Auxiliary Services (BAS) band, and that as a result of the General Docket 13-185 rulemaking, the Department of Defense (DoD) is now co-primary with broadcasters in the 2 GHz TV BAS band, so broadcasters are now required to share virtually all of their previously exclusive BAS spectrum. EIBASS notes that the relationship so far between DoD and broadcasters has a history of agreeing to compatible sharing with many built-in protections for both parties.

IV. Already the "Me Too" Waivers Have Begun

6. EIBASS notes that in addition to Alaska Rural Coalition (ARC) requesting that it too be granted rule waivers for the 6.5 and 7 GHz TV BAS bands, the "reply" comments⁵ of AT&T Services, Inc. (AT&T) indicate that it also would like the rule waivers. So now there are three camels nosing into the BAS tent. If the GCI waiver is deemed to include the entire 7 GHz TV BAS band, even though the rule section for which waiver was requested, Section 101.147(l), only confers rights to 80% of that band (*i.e.*, TV BAS Channels B1 through B4, and B7 through B10), and not the entire band, then EIBASS expects it will not be long until more "me too" waivers are requested for other states. Thus, if the Commission does not want to be inundated with similar waiver requests, no waiver of the obligation to protect the operational area of a TV Pickup station in the same band (and for which GCI, ARA and AT&T have all failed to request), and no super waiver of Section 101.147(l), to include all ten of the 7 GHz TV BAS band channels and forgo reservation of B5 and B6 to ensure that 7 GHz TV Pickup operations are not precluded by Part 101 FS links, should be granted.

V. Why Can't GCI, et al, Use Fiber Optic Links, like AlaskaUnited?

7. EIBASS has learned that AlaskaUnited has managed to construct an extensive fiber optic cable system in Alaska; see the attached Figure 3. The Commission should ask GCI, ARA, AT&T and any other parties requesting rule waivers why they cannot construct fiber optic

⁵ AT&T failed to submit any initial comments.

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interconnects, just as AlaskaUnited has done, not even need a rule waiver, and never ever have to worry about spectrum allocations and radio frequency interference.

VI. Summary

8. EIBASS does not have a problem with 60-MHz wide channels for fixed links in rural Alaska, or even contaminating the 6.5 GHz TV BAS band with fixed links rather than mobile-only operations. If GCI can frequency coordinate a 60-MHz wide channel, the equivalent of 2.4 7 GHz TV BAS channels, then fine. But EIBASS opposes a waiver of the obligation to protect the operational area of a TV Pickup station in the same band, and opposes a super-waiver of the entire 7 GHz band, because forgoing the reservation of two of the ten 7 GHz TV BAS channels for continued use only by broadcasters would eliminate the guarantee that a Part 101 FS station in the 7 GHz band could not preclude all TV Pickup ENG operations.

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List of Figures

9. The following figure has been prepared as a part of these EIBASS WT Docket 16-209 reply comments:

1. Copy of WQRU451 TV Pickup license.
2. Figure showing why "lay fallow indefinitely" is often necessary and prudent.
3. Map of AlaskaUnited fiber optic cable system.

Respectfully submitted,

/s/ Dane E. Ericksen, P.E., CSRTE, 8-VSB, CBNT
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August 3, 2016

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TV Pickup Station WQRU451

REFERENCE COPY

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.



Federal Communications Commission Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: Fox Sports Net Florida Inc.

ATTN: GEORGE BARBOSA
FOX SPORTS NET FLORIDA INC.
500 E. BROWARD BLVD. SUITE 105
FORT LAUDERDALE, FL 33394

Call Sign WQRU451	
File Number	
Radio Service TP - TV Pickup	
SMSA	Station Class MO

FCC Registration Number (FRN): 0022429625

Grant Date 07-29-2013	Effective Date 07-29-2013	Expiration Date 02-01-2021	Print Date
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LOCATION

Fixed Location Address or Area of Operation:

Continental US

City: County: State:

Loc No.	Location Name	Latitude	Longitude	Elevation	Antenna Structure Registration No.
001	Continental US	- -	- -		

FREQUENCY PATHS

Frequency (MHz)	Tol (%)	Emission Desig	EIRP (dBm)	Constr Date	Path No	Seg	Emit Loc No	Ant Hgt (m)	Gain (dBi)	Beam (deg)	POL	AZIM (deg)	Rec Loc No	Rec Call Sign
6875.0- 6900.0	0.00038	8M00D9W	20.000	01-29-2015	001	1	001	6.1	3.0	90.0	V	VARY	001	

Frequency Special Condition:

OPERATION ON FREQUENCIES 6875.000000-6900.000000 NOT PERMITTED WITHIN 56.3 KM OF THE US-CANADA BORDER.

6900.0- 6925.0	0.00038	8M00D9W	20.000	01-29-2015	001	1	001	6.1	3.0	90.0	V	VARY	001	
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Frequency Special Condition:

OPERATION ON FREQUENCIES 6900.000000-6925.000000 NOT PERMITTED WITHIN 56.3 KM OF THE US-CANADA BORDER.

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

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TV Pickup Station WQRU451

Licensee Name: FOX SPORTS NET FLORIDA INC.

Call Sign: WQRU451

File Number:

Print Date:

Frequency (MHz)	Tol (%)	Emission Desig	EIRP (dBm)	Constr Date	Path No	Seg	Emit Loc No	Ant Hgt (m)	Gain (dBi)	Beam (deg)	POL	AZIM (deg)	Rec Loc No	Rec Call Sign
6925.0- 6950.0	0.00038	8M00D9W	20.000	01-29-2015	001	1	001	6.1	3.0	90.0	V	VARY	001	
Frequency Special Condition: OPERATION ON FREQUENCIES 6925.000000-6950.000000 NOT PERMITTED WITHIN 56.3 KM OF THE US-CANADA BORDER.														
6950.0- 6975.0	0.00038	8M00D9W	20.000	01-29-2015	001	1	001	6.1	3.0	90.0	V	VARY	001	
Frequency Special Condition: OPERATION ON FREQUENCIES 6950.000000-6975.000000 NOT PERMITTED WITHIN 56.3 KM OF THE US-CANADA BORDER.														
6975.0- 7000.0	0.00038	8M00D9W	20.000	01-29-2015	001	1	001	6.1	3.0	90.0	V	VARY	001	
Frequency Special Condition: OPERATION ON FREQUENCIES 6975.000000-7000.000000 NOT PERMITTED WITHIN 56.3 KM OF THE US-CANADA BORDER.														
7000.0- 7025.0	0.00038	8M00D9W	20.000	01-29-2015	001	1	001	6.1	3.0	90.0	V	VARY	001	
Frequency Special Condition: OPERATION ON FREQUENCIES 7000.000000-7025.000000 NOT PERMITTED WITHIN 56.3 KM OF THE US-CANADA BORDER.														
7050.0- 7075.0	0.00038	8M00D9W	20.000	01-29-2015	001	1	001	6.1	3.0	90.0	V	VARY	001	
Frequency Special Condition: OPERATION ON FREQUENCIES 7050.000000-7075.000000 NOT PERMITTED WITHIN 56.3 KM OF THE US-CANADA BORDER.														
6438.0	0.00038	8M00D9W	20.000	01-29-2015	001	1	001	6.1	3.0	90.0	V	VARY	001	
Frequency Special Condition: OPERATION ON FREQUENCY 6438.000000 NOT PERMITTED WITHIN 56.3 KM OF THE US-CANADA BORDER. Pursuant to 101.147(j) frequency band 6425 – 6525 MHz is Mobile Only.														
6446.0	0.00038	8M00D9W	20.000	01-29-2015	001	1	001	6.1	3.0	90.0	V	VARY	001	
Frequency Special Condition: OPERATION ON FREQUENCY 6446.000000 NOT PERMITTED WITHIN 56.3 KM OF THE US-CANADA BORDER. Pursuant to 101.147(j) frequency band 6425 – 6525 MHz is Mobile Only.														
6455.0	0.00038	8M00D9W	20.000	01-29-2015	001	1	001	6.1	3.0	90.0	V	VARY	001	
Frequency Special Condition: OPERATION ON FREQUENCY 6455.000000 NOT PERMITTED WITHIN 56.3 KM OF THE US-CANADA BORDER. Pursuant to 101.147(j) frequency band 6425 – 6525 MHz is Mobile Only.														
6463.0	0.00038	8M00D9W	20.000	01-29-2015	001	1	001	6.1	3.0	90.0	V	VARY	001	
Frequency Special Condition: OPERATION ON FREQUENCY 6463.000000 NOT PERMITTED WITHIN 56.3 KM OF THE US-CANADA BORDER. Pursuant to 101.147(j) frequency band 6425 – 6525 MHz is Mobile Only.														
6471.0	0.00038	8M00D9W	20.000	01-29-2015	001	1	001	6.1	3.0	90.0	V	VARY	001	
Frequency Special Condition: OPERATION ON FREQUENCY 6471.000000 NOT PERMITTED WITHIN 56.3 KM OF THE US-CANADA BORDER. Pursuant to 101.147(j) frequency band 6425 – 6525 MHz is Mobile Only.														
6480.0	0.00038	8M00D9W	20.000	01-29-2015	001	1	001	6.1	3.0	90.0	V	VARY	001	

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TV Pickup Station WQRU451

Licensee Name: FOX SPORTS NET FLORIDA INC.

Call Sign: WQRU451

File Number:

Print Date:

Frequency (MHz)	Tol (%)	Emission Desig	EIRP Constr (dBm) Date	Path No	Seg	Emit Loc No	Ant Hgt (m)	Gain (dBi)	Beam (deg)	POL	AZIM (deg)	Rec Loc No	Rec Call Sign
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Frequency Special Condition:

OPERATION ON FREQUENCY 6480.000000 NOT PERMITTED WITHIN 56.3 KM OF THE US-CANADA BORDER.
Pursuant to 101.147(j) frequency band 6425 – 6525 MHz is Mobile Only.

6488.0	0.00038	8M00D9W	20.000 01-29-2015	001	1	001	6.1	3.0	90.0	V	VARY	001	
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Frequency Special Condition:

OPERATION ON FREQUENCY 6488.000000 NOT PERMITTED WITHIN 56.3 KM OF THE US-CANADA BORDER.
Pursuant to 101.147(j) frequency band 6425 – 6525 MHz is Mobile Only.

6496.0	0.00038	8M00D9W	20.000 01-29-2015	001	1	001	6.1	3.0	90.0	V	VARY	001	
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Frequency Special Condition:

OPERATION ON FREQUENCY 6496.000000 NOT PERMITTED WITHIN 56.3 KM OF THE US-CANADA BORDER.
Pursuant to 101.147(j) frequency band 6425 – 6525 MHz is Mobile Only.

7025.0-	0.00038	8M00D9W	20.000 01-29-2015	001	1	001	6.1	3.0	90.0	V	VARY	001	
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7050.0

Frequency Special Condition:

OPERATION ON FREQUENCIES 7025.000000-7050.000000 NOT PERMITTED WITHIN 56.3 KM OF THE US-CANADA BORDER.

6430.0	0.00038	8M00D9W	20.000 01-29-2015	001	1	001	6.1	3.0	90.0	V	VARY	001	
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Frequency Special Condition:

OPERATION ON FREQUENCY 6430.000000 NOT PERMITTED WITHIN 56.3 KM OF THE US-CANADA BORDER.
Pursuant to 101.147(j) frequency band 6425 – 6525 MHz is Mobile Only.

6505.0	0.00038	8M00D9W	20.000 01-29-2015	001	1	001	6.1	3.0	90.0	V	VARY	001	
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Frequency Special Condition:

OPERATION ON FREQUENCY 6505.000000 NOT PERMITTED WITHIN 56.3 KM OF THE US-CANADA BORDER.
Pursuant to 101.147(j) frequency band 6425 – 6525 MHz is Mobile Only.

6513.0	0.00038	8M00D9W	20.000 01-29-2015	001	1	001	6.1	3.0	90.0	V	VARY	001	
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Frequency Special Condition:

OPERATION ON FREQUENCY 6513.000000 NOT PERMITTED WITHIN 56.3 KM OF THE US-CANADA BORDER.
Pursuant to 101.147(j) frequency band 6425 – 6525 MHz is Mobile Only.

6521.0	0.00038	4M00D9W	20.000 01-29-2015	001	1	001	6.1	3.0	90.0	V	VARY	001	
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Frequency Special Condition:

OPERATION ON FREQUENCY 6521.000000 NOT PERMITTED WITHIN 56.3 KM OF THE US-CANADA BORDER.
Pursuant to 101.147(j) frequency band 6425 – 6525 MHz is Mobile Only.

7075.0-	0.00038	8M00D9W	20.000 01-29-2015	001	1	001	6.1	3.0	90.0	V	VARY	001	
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7100.0

Frequency Special Condition:

OPERATION ON FREQUENCIES 7075.000000-7100.000000 NOT PERMITTED WITHIN 56.3 KM OF THE US-CANADA BORDER.

7100.0-	0.00038	8M00D9W	20.000 01-29-2015	001	1	001	6.1	3.0	90.0	V	VARY	001	
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7125.0

Frequency Special Condition:

OPERATION ON FREQUENCIES 7100.000000-7125.000000 NOT PERMITTED WITHIN 56.3 KM OF THE US-CANADA BORDER.

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TV Pickup Station WQRU451

Licensee Name: FOX SPORTS NET FLORIDA INC.

Call Sign: WQRU451

File Number:

Print Date:

Waivers/Conditions:

Antennas employed for mobile use over 6.1 meters may be deployed without specific prior approval of the Commission provided that the overall height of such antennas more than 6.10 meters (20 feet) above ground, including their supporting structures (whether natural formation or man-made), do not exceed any of the slope ratios set forth in Section 17.7(b).

Each use of facilities under this authorization must be prior coordinated with existing users and applicants in accordance with 101.103(d) of the Commission's Rules. If all parties agree, the coordination may be completed verbally.

Operation is prohibited within any of the quiet zones defined in Section 1.924.

Operations within 56.3 km of any International Border are not authorized.

This authorization permits the simultaneous operation of multiple transmitters as long as the technical parameters of each transmitter are consistent with the parameters specified on this authorization and each transmitter is operated in accordance with applicable FCC rules.

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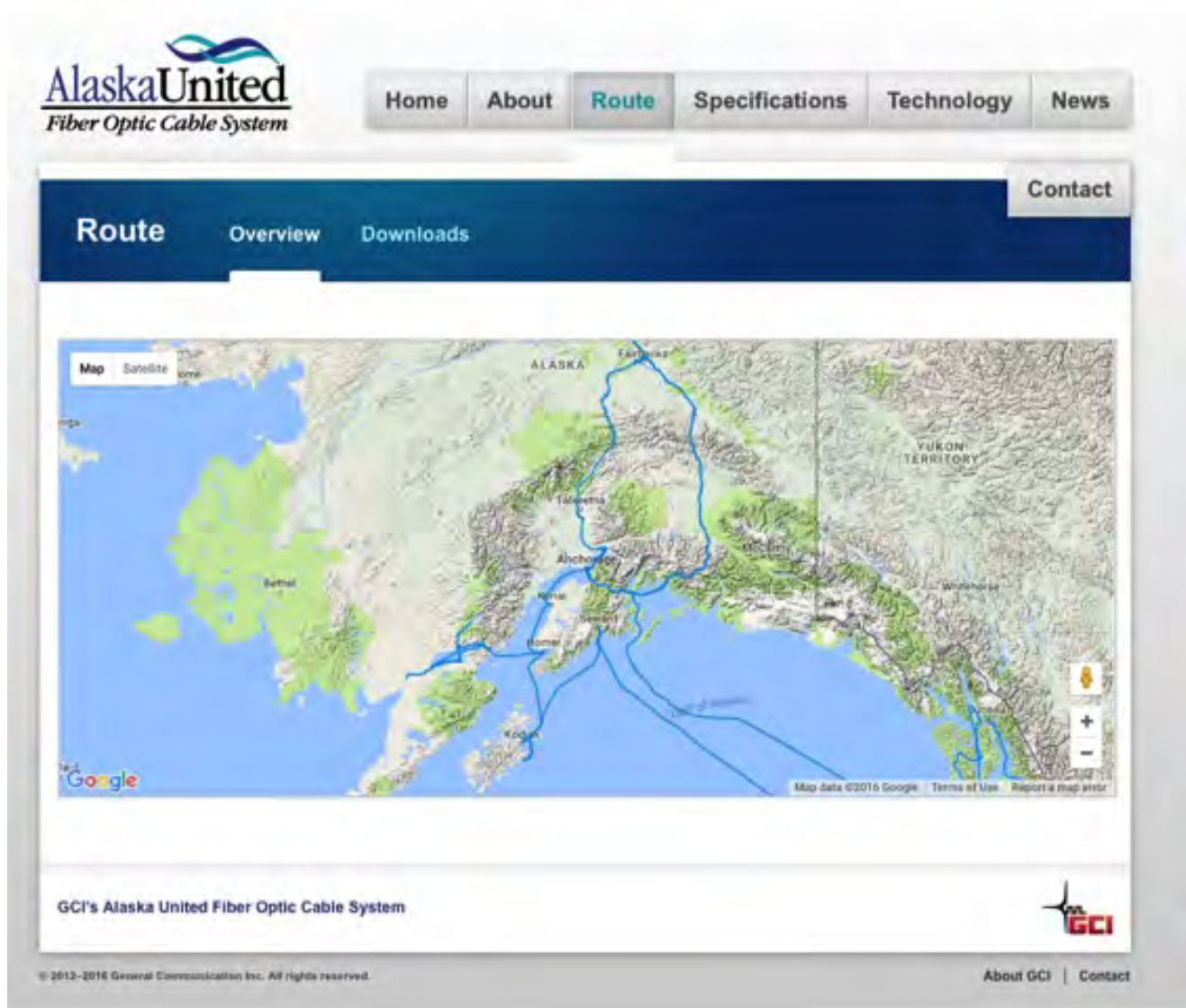
**Why Red Zones in Front of Fire Hydrants Need to
"Lay Fallow Indefinitely"**



Why there is "no parking" in front of fire hydrants. Like ENG spectrum, you never know in advance when or where it will be needed.

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AlaskaUnited Fiber Optic Cable System



The AlaskaUnited fiber optic cable system, taken from
<http://www.alaskaunited.com/route/>.

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AlaskaUnited Fiber Optic Cable System

The screenshot shows the AlaskaUnited Fiber Optic Cable System website. The header includes the company logo and a navigation menu with links: Home, About, Route, Specifications (highlighted), Technology, and News. A secondary navigation bar contains a Contact link. The main content area is titled 'Specifications' and includes a sub-header 'Overview'. The 'Specifications' section is divided into several subsections: Network Redundancy, Route Diversity, Total Design Capacity, Landing Points, Service Life, Greatest Water Depth, and Standards & Protection. Each subsection contains descriptive text about the cable system's capabilities and design.

AlaskaUnited
Fiber Optic Cable System

Home About Route **Specifications** Technology News

Contact

Specifications

Overview

Specifications

Network Redundancy

A separate pair of fiber optic cables connects Juneau to Seattle, Juneau to Anchorage, Anchorage to Fairbanks, Anchorage to Seattle (AU-E) Anchorage to Warrenton (AU-W) and Anchorage to Ketchikan and Ketchikan to Warrenton.

Route Diversity

The Alaska United Network achieves complete route diversity to Anchorage and Seattle by using routes on both AU-East and AU-West to create a physically diverse ring interconnecting these locations. Juneau has a diverse ring through Southeast cable to Ketchikan and the Segment 3 AU-W leg to Ketchikan. Fairbanks has complete route diversity between fiber along the pipeline corridor and fiber along Parks.

Total Design Capacity

220 billion bits per second can be provided in a diversely routed ring configuration utilizing AU-East and AU-West cable segments. Another 530 billion bits per second can be provided as standalone capacity on AU-West. AU-North capacity can be increased to greater than a TB/s through advancements in terrestrial transmission abilities.

Landing Points

Alaska end: Juneau, Whittier and Valdez CONUS, and Ketchikan: Seattle, Washington; Warrenton, Oregon

Service Life

Minimum 25 years

Greatest Water Depth

15,617 ft.

Standards & Protection